

Bus on Shoulder Systems (BOSS)

Bus on shoulder operation is a low-cost treatment that can provide immediate benefits to transit whenever mainline travel is experiencing moderate to heavy degrees of congestion. Bus on shoulder operation allows authorized transit buses with trained drivers to operate on the shoulders of selected freeways and other highways in order to bypass congestion and maintain transit schedules.

Buses can only use shoulders when travel speeds are below 35 MPH in the main lanes, and buses can only travel up to 15 MPH faster than other vehicles. In addition, bus on shoulder operation is a subservient use of the shoulder: the use of the shoulder as a breakdown lane for emergency operations continues as today, and buses must yield to everything in the shoulder.

Bus on shoulder operations were first implemented in Minnesota around 20 years ago, with nearly 300 shoulder-miles in use today. Today, more than 10 states now use bus on shoulder, and no state has discontinued an operating bus on shoulder program for operational or safety reasons once commenced.

Minnesota has identified a number of benefits with bus on shoulder operation, including:

- Shorter and more predictable and reliable transit times
- Fewer missed transfer connections
- Increased transit ridership
- Reduced driver overtime
- Decreased operational costs

North Carolina will implement a pilot bus on shoulder program on portions of I-40 in the Research Triangle area in 2012. If the test proves to be successful, the program could be expanded to other segments of I-40 and/or other routes, with the goal of creating a regional bus on shoulder system.

Bus on Shoulder guidelines for North Carolina

If travel speeds in main lanes are:

65 MPH, 55 MPH, even 35-40 MPH
 20, 25, 30, 35 MPH
 15 MPH
 10 MPH
 5 MPH
 Stopped (0 MPH)

Then transit buses on shoulder:

N/A: Cannot use shoulder
 Can go up to 35 MPH
 Can go up to 30 MPH
 Can go up to 25 MPH
 Can go up to 20 MPH
 Can go up to 15 MPH

